

WHAT IS CLAIMED IS:

- 1 1. An intraluminal stent comprising:  
a generally elongate tubular body formed of an  
elongate helically wound wire, the wire being formed into  
successive waves along the length of the wire, the waves  
5 being arranged in non-overlapping longitudinally spaced  
succession along the length of said tube, the longitudinal  
spacing of the helical windings being less than twice the  
8 amplitude of the wave.
- 1 2. An intraluminal stent of claim 1 wherein  
longitudinally adjacent ones of said waves are  
3 longitudinally nested along the length of said tubular body.
- 1 3. An intraluminal stent of claim 2 wherein said  
longitudinally nested waves define peaks which are linerally  
3 aligned.
- 1 4. An intraluminal stent of claim 1 wherein said  
longitudinal spacing of the helical windings is less than  
3 the amplitude of the wave.
- 1 5. An intraluminal stent of claim 1 wherein said  
stent includes said wire being helically wound in non-  
overlapping disposition and wherein said wire defines an  
open area between said helically wound wire and wherein said  
5 percentage of open surface area of said stent in  
relationship to the total surface area of said stent is less  
7 than 30% in the closed condition.
- 1 6. An intraluminal stent of claim 1 wherein said  
2 tubular body is uniformly flexible along the length thereof.
- 1 7. An intraluminal stent of claim 6 wherein said  
stent is radially expandable after intraluminal  
3 implantation.

1 8. A radially expandable generally tubular  
endoluminal implantable prosthesis comprising:

5 a wire which is wound in a helical configuration  
to define a generally elongate tubular body, the wire  
including successively formed waves along the length of said  
7 wire, each wire wave being non-overlappingly nested within  
the wave formed longitudinally thereadjacent.

1 9. A prosthesis of claim 8 wherein said wire waves  
are of generally uniform configuration defining a peak-to-  
3 peak amplitude of a preselected first dimension.

1 10. A prosthesis of claim 9 wherein said  
longitudinally adjacent wire waves are spaced apart a  
4 preselected second dimension which is less than the  
preselected first dimension.

1 11. A prosthesis of claim 10 wherein said wire has a  
given wire diameter and wherein said wound wire defines a  
generally cylindrical outer surface having solid portions  
5 formed by said wire and open portions formed between said  
wound wire.

1 12. A prosthesis of claim 11 wherein said generally  
cylindrical outer surface defines a total surface area  
including an open surface and a wire surface and wherein  
5 said non-expanded wire surface substantially exceeds said  
open surface.

1 13. A prosthesis of claim 12 wherein said open surface  
2 area is less than 30% of said total surface area.

1 14. An intraluminal stent comprising:  
an elongate tubular body formed of a single wound  
wire;

5 said wire having a wave-like pattern defining a  
plurality of waves formed along the length of said wire,  
each said wave defining a leg segment between wave peaks,  
each leg segment being of a length different from the next  
8 adjacent leg segment.

1 15. An intraluminal stent of claim 14 wherein said  
wire is wound about a central axis forming said tubular  
3 body.

1 16. An intraluminal stent of claim 15 wherein tubular  
body includes longitudinally successive waves along the  
length thereof, each said wave being nested within the wave  
4 formed longitudinally thereadjacent.

1 17. An intraluminal stent of claim 14 wherein each  
wave is defined by a peak and a pair of wave leg segments  
3 extending from said peak.

1 18. An intraluminal stent of claim 17 wherein one of  
said wave leg segments of said pair has a length greater  
3 than the other wave leg segment of said pair.